

Model PM300-E Food and Beverage Industry



Features

- Measuring ranges from 1bar to 600bar
- Absolute, gauge and sealed gauge
- Accuracy: $\pm 0.25\%$ FSO or $\pm 0.5\%$ FSO
- Calibrated and temperature compensated
- Flush diaphragm construction
- Piezoresistive pressure sensor design
- Variety of Pressure & Electrical connections
- Output 4...20mA, 0...10V, 0...5V and others

Product Overview

PM300-E is made from high-quality silicon piezoresistive chip. All process connections of the flush pressure transmitter are made of stainless steel, fully welded and isolate the process medium from the pressure measuring instrument via a positive seal. The PM300-E is precision engineered to fit food, pharmaceutical and chemical liquid pressure measurement.

A wide range of process connection and electrical connection options are available to meet almost requirement.

Applications

- Process control systems
- Food and beverage
- Medical
- Papermaking

Standard Pressure Ranges

Nominal pressure	gauge	sealed gauge	absolute
0...1bar	•		•
0...1.6bar	•		•
0...2.5bar	•		•
0...4bar	•		•
0...6bar	•		•
0...10bar	•	•	•
0...16bar	•	•	•
0...25bar	•	•	
0...60bar		•	
0...100bar		•	

Other pressure ranges available. Please consult the factory.

Flush Diaphragm Pressure Transmitter

Performance Specifications

Parameter	Value	Units	Notes
General			
Pressure Range	0-1,...,600	bar	1bar=14.5psi
Overpressure	1.5xFS	bar	
Environmental			
Operating Temperature Range	-20 to +85(standard), 20 to +100	°C	-4°F to 185°F
Compensated Temperature Range	-10 to +70	°C	14°F to 158°F
Storage Temperature Range	-40 to +125	°C	-40°F to 257°F
Vibration	10	g	20 to 2000Hz
Shock	100	g	10ms
Cycles	10x10 ⁵	cycles	
Electrical @25°C(77°F)			
Output Signal	4...20mA 0...5Vdc 1...5Vdc 0...10Vdc 0.5...4.5Vdc(ratiometric)		
Power Supply(Vs)	12...36Vdc 12...36Vdc 12...36Vdc 15...36Vdc 5Vdc		
Load Resistance	<(Vs-12)/0.02A (For current output), >10kΩ (For voltage output)		
Insulation Resistance	100MΩ@50Vdc		
Physical Specifications			
Media Compatibility	All media compatible with 316L stainless steel		
Housing	304 stainless steel		
Diaphragm	316L stainless steel		
Seal Ring	Viton or NBR		
Oil Filling	Silicone oil		
Protection	IP65(Standard)		
Net Weight	Approx.285g		

Parameter	Minimum	Typical	Maximum	Units	Notes
Performance					
Accuracy	0.1	0.25	0.5	%FSO	1,2
Temp Coeff - Zero		±1.5	±2	%FSO	3
Temp Coeff - Span		±1.5	±2	%FSO	3
Long-Term Stability		±0.2	±0.3	%FSO/year	1

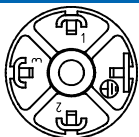
Notes

- All values measured at 25°C(77°F)
- Including non-linearity, hysteresis and repeatability.
- 10°C to 70°C(14°F to 158°F) with reference to 25°C(77°F);.


The listed specifications and dimensions are subject to change without prior notice.

Connection Diagrams

Connector DIN43650		
	2-wire(current)	3-wire(voltage)
Supply+	1	1
Signal+	2	3
Gnd	-	2

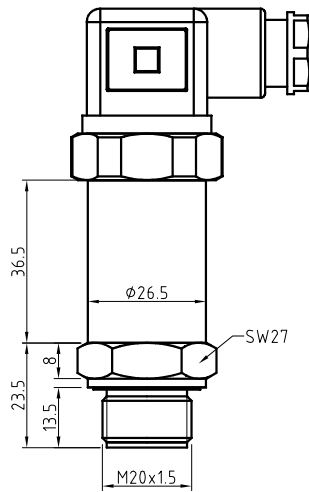


Cable outlet		
	2-wire(current)	3-wire(voltage)
Supply+	red	red
Signal+	black	green
Gnd	-	black



Flush Diaphragm Pressure Transmitter

Dimensions (in mm)



Ordering Information

Option1: Model	
PM300-E	Flush Diaphragm Pressure Transmitter
Option2: Pressure Ranges	
0010	0...1bar 0250 0...25bar
0016	0...1.6bar 0400 0...40bar
0025	0...2.5bar 0600 0...60bar
0040	0...4bar 1000 0...100bar
0060	0...6bar Cxxx Customized range
0100	0...10bar
0160	0...16bar
Option3: Pressure Type	
G	gauge
A	absolute
S	sealed gauge
Option4: Output Signal	
42	4...20mA
05	0...5Vdc
15	1...5Vdc
10	0...10Vdc
45	0.5...4.5(ratiometric)
Option5: Accuracy	
02	0.25%FSO
05	0.5%FSO
Option6: Electrical Connection	
D	Connector DIN43650
C	Cable outlet with PVC-cable,length=1.5m
M	M12x1, 4-pin
-	
Option7: Mechanical Connection	
M2	M20x1.5(male) N2 1/2NPT(male)
G2	G1/2(male) P2 PT1/2(male)
G10	G1(male) Nx Customized
PM300-E	0010 G 42 02 D G2 Examples of Ordering Code: PM300-E-0010-G-42-02-D-G2

This data sheet contains product specification, properties are not guaranteed. Subject to change without notice.